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(74) Agent: **MARICH, Eric**; The Babcock & Wilcox Company, 20 South Van Buren Avenue, Barberton, OH 44203-0351 (US).

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(71) Applicant (*for all designated States except US*): **THE BABCOCK & WILCOX COMPANY** [US/US]; 20 S. Van Buren Avenue, Barberton, OH 44203-0351 (US).

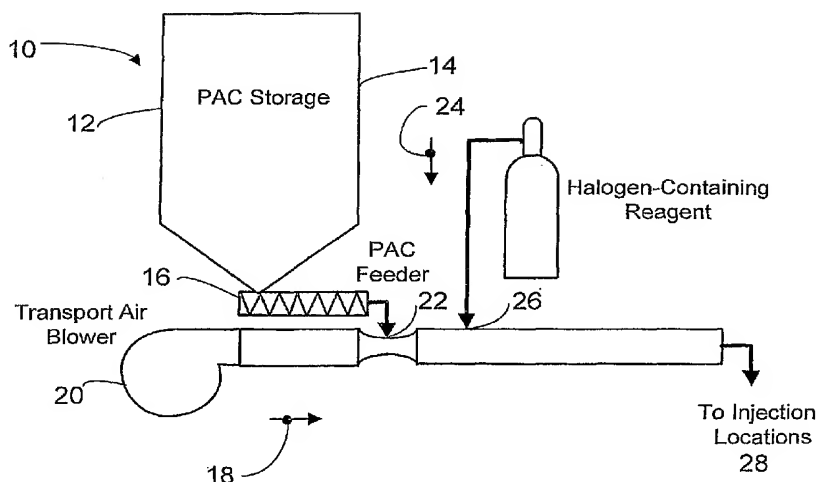
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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **DOWNS, William** [US/US]; 8645 Schubert Avenue, Alliance, OH 44601 (US). **FARTHING, George, A., Jr.** [US/US]; 12276 Cenfield NE, Alliance, OH 44601 (US).

[Continued on next page]

(54) Title: DYNAMIC HALOGENATION OF SORBENTS FOR THE REMOVAL OF MERCURY FROM FLUE GASES



(57) Abstract: A halogen-containing gas is injected into a flowing transport air/sorbent stream at a point close to the point where the sorbent and transport air first mix to maximize the residence time available for the halogen-containing compound to be adsorbed onto the sorbent surface prior to the sorbent being injected into a flue gas containing mercury. This process maximizes the benefit and utilization of the halogen-containing reagent by placing it exactly where it is needed to facilitate elemental mercury removal - on the surface of the sorbent. The sorbent particles with their loading of adsorbed halogen-containing reagent enter the flue gas with a high reactivity for the removal of elemental mercury.

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